ZXV10 W811N
Indoor Wireless Access Point
User Manual

Version: 1.0

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1 Safety Precautions

Installation

- Use the default power adapter accompanying the equipment. Otherwise, the equipment may be damaged or not be functioning properly.
- Pay close attention to the load of the power socket or power cable. The overloaded power socket or damaged power cable/connector may trigger electric shock or fire. Check relevant cables periodically and replace the damaged cables immediately.
- Ensure proper heat dissipation space to prevent this product and relevant accessories from overheat-caused issues. Do not block the heat dissipation holes with any objects.
- Keep this product away from heat sources, high temperature, or sunlight.
- Keep this product away from damp or moisture places.
- Do not put this product onto an unstable surface.

Usage

- When you are not using this product or want to clean it, power off this product and remove power cables. Pay attention to the power adapter surface where the temperature may be high.
- Wait at least 15s between two equipment startups.
- Protect this product from damages caused by lightning or abrupt increase of the current or voltage. Remove the power cable if this product is to be unused for a long period of time.

Service

Do not disassemble this product without authorization; otherwise, the warranty of this product will become ineffective. Contact your service provider when any of the following occurs on this product:

- The power cable or connector is damaged.
- Certain liquid falls into this product accidentally.
- This product is soaked with rain or other liquid.
- This product cannot work even when no operation instructions are violated.
- The shell of this product is damaged after fallen down or seriously struck.
- The indicators of this product are working abnormally.

2 Product Introduction

2.1 Product Overview

ZTE broadband wireless access product works at 2.4 GHz band, and accords with the IEEE 802.11b, 802.11g, and 802.11n standards. It adopts the Orthogonal Frequency Division Multiplexing (OFDM) technology and provides the data transmission rate of 300 Mbps maximally. The product can be applied in the mobile, telecom industry and enterprises. It is featured by powerful functions such as high transfer rate, high receiving sensitivity, and long transmission distance, and can provide powerful solution to basic telecom operators, ISP and industry enterprises. It supports several security encryption mechanism and access rights control functions, and provides strong protection to WLAN. Besides, it supports power supply to the equipment through the POE mode.

2.2 Typical Applications

- Medium- and small-sized enterprises where mobile office is achieved by wireless coverage
- Remote access to enterprise networks

  This product supports multiple functions such as email, file transfer, terminal emulation, is applicable to various wireless network connection modes (including point-to-point (P2P), single-access, multi-access, and roaming), and flexibly adapts to diverse applications (including intra-LAN connection and inter-network connection).
- Places where network connections are difficult

  This product can work in places such as old buildings or asbestos buildings where routing cables is difficult.
- Mobile office systems

  This product can be used by retailers and manufacturers or at other places that are often changed.
- Temporary LANs for special projects

  This product is applicable to temporary LANs at business exhibitions, exhibition halls, or construction fields, when the retailers or the flight/shipping companies need to expand space during peak hours, or when audit personnel needs to create customer working groups.
- Access to the database by workers on the move

  This product can be used by doctors, nurses, or retailers to access the database for information exchange.
- Home office users

  This product can help home office users easily and quickly set up a small PC network.

2.3 Indicator Status Description

The following table describes the indicators of the ZXV10 W811N.

Name	Status	Description
Status	Blinking	The device is starting up, upgrading software, or detecting an error during self-check.
	Off	The device works normally.
Power	On	The device is powered on.
	Off	The device is powered off or is faulty.
WLAN	On	The device enables the WLAN function normally.
	Blinking	The device is transmitting data.
	Off	The device does not enable the WLAN function or is faulty.
Eth	On	The device is successfully connected to the 10M/100M/1000M Ethernet port.
	Blinking	The device is transmitting data.
	Off	The device fails to connect to the Ethernet port or is faulty.

2.4 Interface Description

ZXV10 W811NThe interfaces and buttons are described in the table as below.

Interface Name	Description
Power	Power interface, connected to the original power adapter accompanying the device
Reset	Reset button; in power-up running status, keep pressing the button for over 5s, and the current configuration will be reset as factory-leaving configuration. The system will restart automatically
Ethernet	Ethernet interface, connected to the network port of computer or other network equipment through the RJ-45 network wire
COM	Console port, connecting the computer and the Console port; Baud rate is 115200. It supports the user to manage and debug equipments through the Console mode (not suggested for normal users)

3 Product Installation

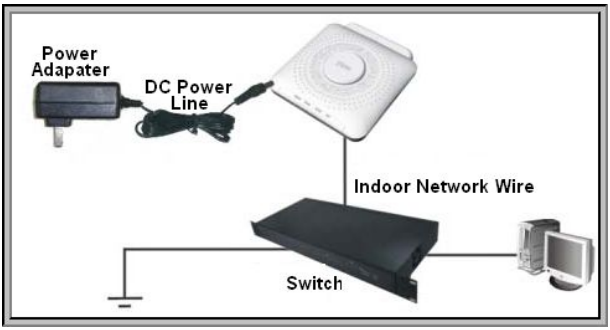
3.1 Installation Requirements

Before the device is installed and used, the following requirements must be met:

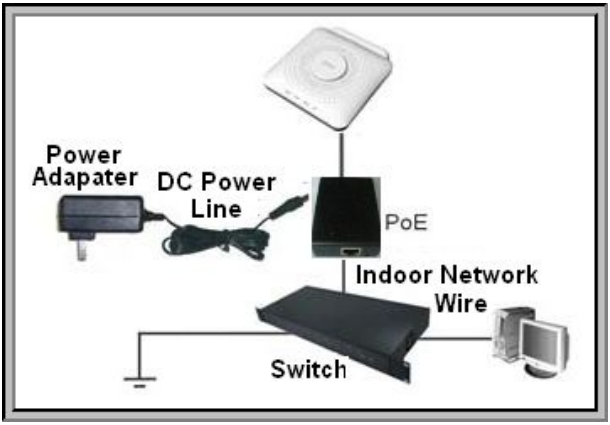
- A computer equipped with a 10M/100M/1000M Base-TX adaptive fast Ethernet NIC is available.
- The IP address of the Ethernet NIC is in the same network segment as the IP address of the device, for example, 192.168.0.1. The default IP address of the device is 192.168.0.228.
- It is recommended that you use the browser of the Microsoft IE 6.0 or a later version and disable the proxy service of the browser.
- Two network cables used for connecting devices are available.

3.2 Product Installation

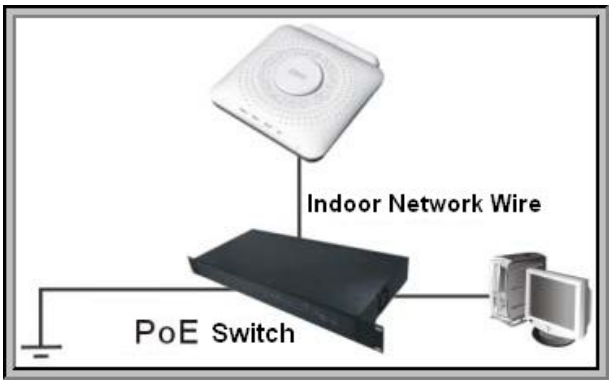
- The product supports direct power supply through the standard external power adapter, as shown in the figure below.



- If the switch does not support PoE power supply, the product supports 48V power supply over Ethernet through the standard PoE module, as shown in the figure below.

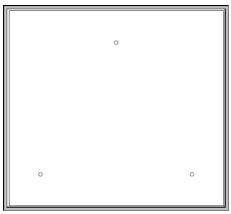


- The product supports direct power supply through the standard PoE switch, as shown in the figure below.



ZXV10 W811NFollow the steps below to mount the product on the wall.

1. Press the positioning paperboard against the wall to be mounted with the device, as shown in the figure below.



2. Hammer in screws (expansion bolts are suggested) at the position of the three holes in the paperboard.
3. Remove the paperboard, and then mount the device on the wall.

3.3 Computer Configuration

3.3.1 Checking Computer Settings

First, disable the proxy service. It is recommended to shut down the VPN software and related firewall software on the current computer. The following considers Microsoft Internet Explorer as an example.

1. In an IE window, choose [**Tools→Internet Options**] from the main menu. The **Internet Options** dialog box is displayed.
2. Click the **Connections** tab and click **LAN Settings**.
3. In the dialog box that is displayed, clear the **Use a proxy server** check box and click **OK**.

3.3.2 Setting TCP/IP Parameters

This manual considers Windows XP as an example to describe how to set TCP/IP parameters.

1. On the Windows task bar, choose [**Start→Control Panel**].
2. In the **Control Panel** window, double-click the **Network Connections** icon.

3. In the **Network Connections** window, right-click **Local Area Connection** and then choose **Properties**. The **Local Area Connection Properties** dialog box is displayed.
4. Select **Internet Protocol (TCP/IP)** and click **Properties**. The **Internet Protocol (TCP/IP) Properties** dialog box is displayed.
5. Select the **Use the following IP address** option and set the IP address of the local computer to be in the same network segment as the IP address of the ZXV10 W811N. That is, set the IP address to 192.168.0.x. Wherein, x is a hexadecimal integer ranging from 1 to 227 or 229 to 254.
6. Click **OK** to save the settings.

4 Device Preparation

4.1 Default Settings

The following table describes the default settings of the ZXV10 W811N.

Parameter	Default Value
IP Address/Mask of ETH Interface	IP address: 192.168.0.228; subnet mask: 255.255.255.0
User Name/Password	Initial user name/password for common users: user/user; initial user name/password for administrators: admin/admin
Language of Web Page	English
AP Mode	Fit AP mode
AP Name	APxxxxxxxxxxxx; Wherein, xxxxxxxxxxxx indicates the MAC address of the device.
Country/Region	Default
AC Discovery Mode	DHCP
WAN Type	DHCP
Wireless Mode	Mixed (802.11b+802.11g)
SSID	SSID1

4.2 Preparing for Settings

Check and confirm the following points:

- A straight-through or crossover cable connects a PC to an Ethernet port on ZXV10 W811N, with the corresponding LAN interface always on or blinking. If a wireless network is used for connection, the WLAN (Wi-Fi) network has already been configured, with the corresponding WAN interface always on or blinking.
- **Internet (TCP/IP)** has correctly been configured for the PC.

- The settings of the agent server for the browser such as IE have been disabled.
- Certain data has been provided by the service provider (for details of the data, contact the service provider).

4.3 Logging in to the System

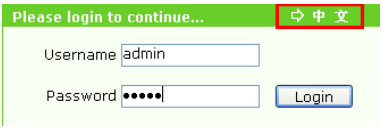
The ZXV10 W811N supports setting parameters based on Web. You can set and manage the ZXV10 W811N through a Web browser.

The Web page of the ZXV10 W811N supports both Chinese and English languages. By default, the system provides Web pages in English.

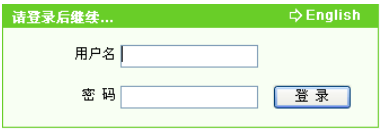
1. In the address bar of the IE browser, enter `http://192.168.0.228` (default IP address of the Eth interface of the ZXV10 W811N), and then press **Enter**. A login dialog box is displayed, as shown in the following figure.

   Note:

   After you enter the IP address and then press **Enter**, the system displays a dialog box indicating that the IE will access an insecure network. In this case, click **Yes** to display the login dialog box.

2. (Optional) Click **中文** or **English** at the upper right corner of the login dialog box to switch the display language.

3. Enter the user name and password, and click **Login**. The Web page of the ZXV10 W811N is displayed.

   Note:

   The initial user name and password for common users are **user** and **user**. Common users only have the rights to view the device status. The initial user name and password for administrators are **admin** and **admin**. Administrators have the rights to set and manage the ZXV10 W811N through the IE browser.

   - Click **Logout** at the upper right corner to log out the current user and return to the login dialog box.
   - Click

     at the lower left corner to view the help topics related to the current page.
   - Click the **Help** at the upper part. On the **Help** page, view the required help topic.
   - Click

     at the upper left corner to switch the display language.

5 Device Status

5.1 Viewing Device Information

1. Choose [**Status→Device Information**] from the main menu. The **Device Information** page is displayed.
2. View the device information, including device model, device SN, batch number, hardware version, software version, BOOT version, and AP name.

5.2 Network Interface Information Viewing

5.2.1 Viewing Ethernet Interface Information

1. Choose [**Status→Network Interface→Ethernet**] from the main menu. The **Ethernet** page is displayed.
2. View the information of Ethernet interface, including interface name, MAC address, status, mode, received packets/bytes, and transmitted packets/bytes.

Note:

Click **Refresh** refresh the current settings of the device.

5.2.2 Viewing Network Connection Information

1. Choose [**Status→Network Interface→WAN Connection**] from the main menu. The **WAN Connection** page is displayed.
2. View the connection information, including connection type, WAN MAC address, NAT, IP address, DNS, gateway, connection status, and remaining lease time.

Note:

Click **Refresh** refresh the current settings of the device.

5.3 Viewing WLAN Interface Information

1. Choose [**Status→User Interface→WLAN Interface information**] from the main menu. The page is displayed.
2. On the page, view the WLAN interface information, including status of wireless network connection, channel, SSID name, authentication mode, encryption mode, MAC address, received packets/bytes, transmitted packets/bytes, received/transmitted error packets, and packet loss during packet receive and transmission.

Note:

Click **Refresh** refresh the current settings of the device.

6 Network Configuration

6.1 Broadband Connection Configuration

6.1.1 Setting Broadband Connection (Fat AP)

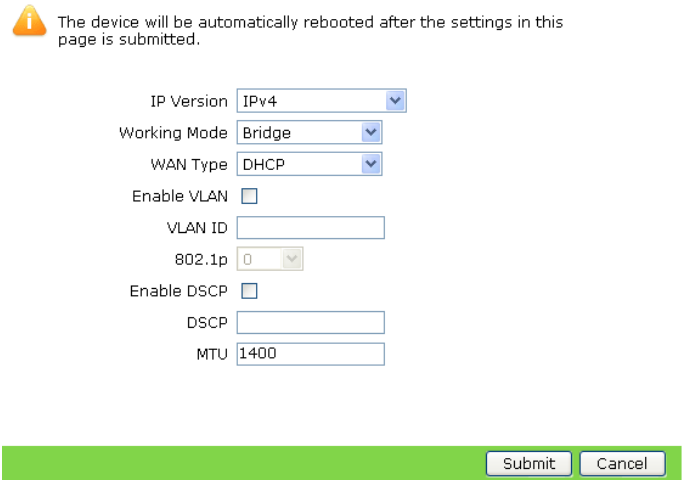
The wireless AP ZXV10 W811N supports two working modes: fat AP mode and fit AP mode. By default, the ZXV10 W811N works in fit AP mode.

To change the AP mode of the ZXV10 W811N, log in to the Web page of the ZXV10 W811N as the administrator and then choose [**Administration→AP Management→AP Mode**] from the main menu.

Note:

After the AP mode is switched, the device will automatically restart.

1. Choose [**Network→WAN→WAN Connection**] from the main menu. A page is displayed, as shown in the following figure.



2. Refer to the above table to set the parameters. For details, refer to Setting Broadband Connection (Fit AP).
   - Working Mode: The available options are **Bridge** and **Router**. By default, it is **Bridge**.
   - WAN Type: When **IP Version** is set to **IPv4**, the available options are **DHCP**, **Static**, and **PPPoE**. When **IP Version** is set to **IPv6** or **IPv4/v6**, the available options are **DHCP** and **PPPoE**. By default, it is **DHCP**.
3. Click **Submit** to submit the current settings.

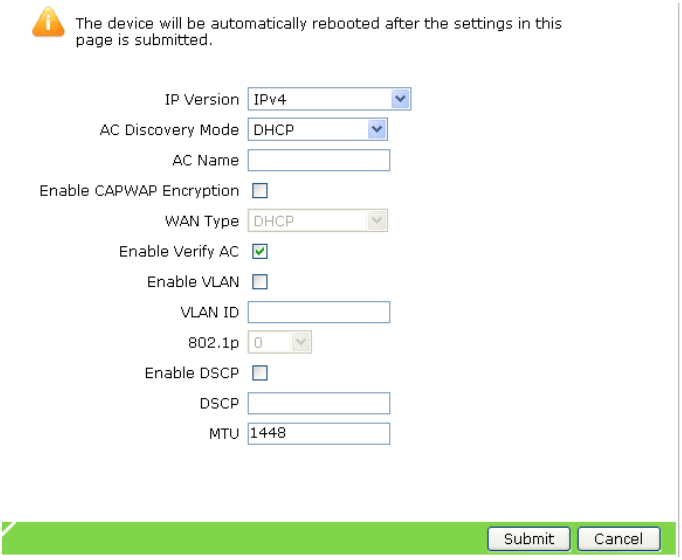
   Note:

   Any change to the settings on this page will take effect after the device is restarted.

6.1.2 Setting Broadband Connection (Fit AP)

AP Mode of the device is set to **Fit**.

1. Choose [**Network→WAN→WAN Connection**] from the main menu. A page is displayed, as shown in the following figure.



2. Refer to the following table to set the parameters.

Parameter	Description
IP Version	Indicates the version of the IP protocol. The available options are **IPv4**, **IPv6**, and **IPv4/v6**. By default, it is **IPv4**.
AC Discovery Mode	Indicates the AC discovery mode. The available options are **DHCP**, **Static**, **DNS**, and **Broadcast**. By default, it is **DHCP**.
AC Name	Indicate the AC name. This parameter is required when **AC Discovery Mode** is set to **DHCP** or **DNS**.
Enable CAPWAP Encryption	Enables or disables CAPWAP encryption.
WAN Type	Indicates the WAN type. When **IP Version** is set to **IPv4**, the available options are **DHCP**, **Static**, and **PPPoE**. When **IP Version** is set to **IPv6** or **IPv4/v6**, the available options are **DHCP** and **PPPoE**. By default, it is **DHCP**. When **AC Discovery Mode** is set to **DHCP**, this parameter is set to **DHCP**.
Enable Verify AC	By default, this function is enabled.

Parameter	Description
Enable VLAN	Enables or disables the function of WLAN configuration. The WLAN ID and 802.1p are used to specify the VLAN and priority of the device.
VLAN ID	Indicates the VLAN tag of data packets transmitted through the WAN interface. It ranges from 0 to 4094.
802.1p	Indicates the processing priority. It ranges from 0 to 7 and is applicable only to multi-WAN connections. By default, it is 0. The value 0 indicates that the priority is not set. In this case, the greater the value, the higher the priority.
Enable DSCP	Enables or disables the differential services code point (DSCP) function for data streams.
DSCP	Indicates the DSCP value. It ranges from 0 to 63.
MTU	Indicates the maximum transmission unit. By default, it is 1448.
Wireless Switch IP (1–4)	Indicates the IP address of the connected wireless switch when **AC Discovery Mode** is set to **Static**.
Wireless Switch IPv6 (1–4)	Indicates the IPv6 address of the connected wireless switch when **IP Version** is set to **IPv6** or **IPv4/v6** and **AC Discovery Mode** is set to **Static**.
Wireless Switch Name (1–4)	Indicates the name of the connected wireless switch when **AC Discovery Mode** is set to **DNS**.
Username/Password	Indicates the user name and password of the PPPoE connection when **WAN Type** is set to **PPPoE**.
Authentication Type	Indicates the authentication type when **WAN Type** is set to **PPPoE**. The available options are **Auto**, **Password Authentication Protocol (PAP)**, and **Challenge Handshake Authentication Protocol (CHAP)**. This parameter is determined by carriers according to BAS.
IP Address/Mask	Indicates the IP address and mask of the static connection when **WAN Type** is set to **Static**.
Default Gateway	Indicates the default gateway address of the static connection when **WAN Type** is set to **Static**.
DNS (1–3)	Indicates the DNS of the static connection when **WAN Type** is set to **Static**.

Parameter	Description
Global Address Obtaining Mode	Indicates the mode of obtaining the global address when **IP Version** is set to **IPv6** or **IPv4/v6**. The available options are **Stateless auto-configuration**, **Manual**, and **DHCPv6**.
Gateway Obtaining Mode	Indicates the mode of obtaining the gateway when **IP Version** is set to **IPv6** or **IPv4/v6**. The available options are **Stateless auto-configuration** and **Manual**.
DNS Obtaining Mode	Indicates the mode of obtaining DNS when **IP Version** is set to **IPv6** or **IPv4/v6**. The available options are **Stateless auto-configuration**, **Manual**, and **DHCPv6**.
DHCP Enabled Prefix Delegation	Enables or disables the DHCP prefix proxy when **IP Version** is set to **IPv6** or **IPv4/v6**.

3. Click **Submit** to submit the current settings.

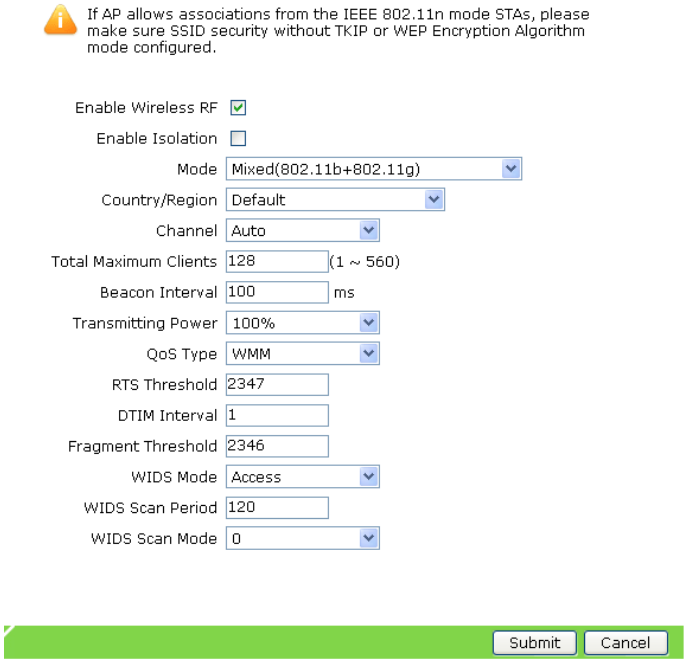
Note:

Any change to the settings on this page will take effect after the device is restarted.

6.2 WLAN Configuration

6.2.1 Setting Basic Parameters

1. Choose [**Network→WLAN→Basic**] from the main menu. The **Basic** page is displayed, as shown in the following figure.



2. Refer to the following table to set the parameters.

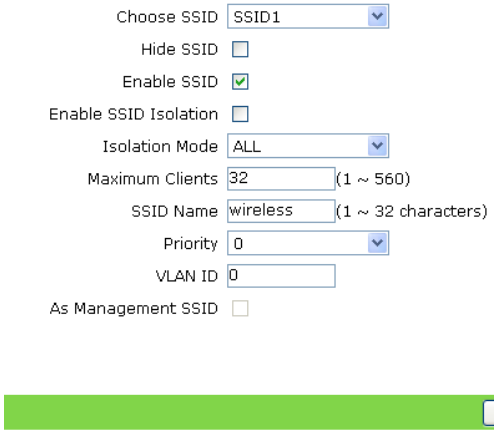
Parameter	Description
Enable Wireless RF	Enables or disables the function of WLAN RF.
Enable Isolation	Enables or disables the function of SSID isolation. By default, this function is disabled.
Mode	The available options are **IEEE 802.11b Only**, **IEEE 802.11g Only**, **IEEE 802.11n Only**, **Mixed(802.11b+802.11g)**, and **Mixed(802.11b+802.11g+802.11n)**.
Country/Region	Indicates the country or region. Set this parameter according to the actual condition. By default, it is China.
Channel	Selects the required channel according to country code. The available options are **Auto** or a value ranging from 1 to 13. By default, it is **Auto**. The channel used for communication between a wireless AP and a wireless site is determined by the local management environment. All the sites that communicate with the ZXV10 W811N must have the same channel.
Total Maximum Clients	Indicates the maximum number of access users allowed. It ranges from 1 to 560.

Parameter	Description
Beacon Interval	By default, it is 100 ms.
Transmitting Power	The available options are **Auto**, **100%**, **90%**, **80%**, **70%**, **60%**, **50%**, **40%**, **30%**, **20%**, and **10%**. By default, it is **100%**. The power level refers to the percentage of the output power to the maximum power. Usually, the higher the power, the longer the transmission distance.
QoS Type	The available options are **Disabled**, **WMM**, and **SSID**. By default, it is **WMM**.
RTS Threshold	Indicates the threshold of sending requests.
DTIM	Indicates the DTIM interval.
Fragment Threshold	Indicates the size of wireless fragment. It is a limit to packet size. If the size of a data packet exceeds the threshold, the packet will be fragmented and then transmitted with multiple data packets.
WIDS Mode	The available options are **Access**, **Monitor**, and **Mixed**. By default, it is **Access**.
WIDS Scan Period	Indicates the scanning period of WIDS. By default, it is 120.
WIDS Scan Mode	This parameter ranges from 0 to 13. By default, it is 0.

3. Click **Submit** to submit the current settings.

6.2.2 Setting SSID

1. Choose [**Network→WLAN→SSID Settings**] from the main menu. A page is displayed, as shown in the following figure.



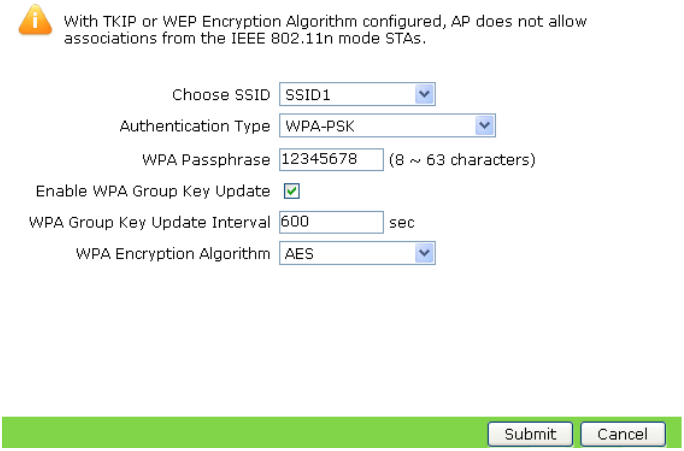
2. Refer to the following table to set the parameters.

Parameter	Description
Choose SSID	Indicates the SSID. It ranges from SSID1 to SSID16.
Hide SSID	Hides the SSID.
Enable SSID	Enables or disables the SSID.
Enable SSID Isolation	Enables or disables the internal isolation function of SSID.
Isolation Mode	Indicates the isolation mode. The available options are **Unicast**, **Broadcast**, **Multicast**, and **All**. By default, it is **All**.
Maximum Clients	Indicates the maximum number of access users allowed by SSID. It ranges from 1 to 560. By default, it is 32.
SSID Name	Indicates the name of the SSID. It consists of 1 to 32 characters.
Priority	Indicates the priority of the SSID. It ranges from 0 to 7. By default, it is 0. The value 0 indicates that the priority is not set. In this case, the greater the value, the higher the priority.
VLAN ID	Indicates the VLAN tag of data packets transmitted through the interface. It ranges from 0 to 4094.
As Management SSID	Disabled by default; configure this SSID whether the SSID used by the management device.

3. Click **Submit** to submit the current settings.

6.2.3 Setting Security Parameters

1. Choose [**Network→WLAN→Security**] from the main menu. On the page that is displayed, set **Authentication Type** to **WPA-PSK**.



2. Refer to the following table to set the parameters.

Parameter	Description
Choose SSID	Indicates the SSID. It ranges from SSID1 to SSID16.
Authentication Type	Indicates the authentication type. The available options are **Open System** (not encrypted), **Shared Key**, **Open System & Shared Key**, **WPA-PSK**, **WPA2-PSK**, **WPA/WPA2-PSK**, **WPA-EAP**, **WPA2-EAP**, **WPA/WPA2-EAP**, **WAPI-PSK**, and **WAPI-CERT**.
WPA Passphrase	Indicates the WPA encryption key. It consists of 8 to 63 characters.
Enable WPA Group Key Update	Enables or disables the key update function of WPA group. By default, this function is enabled.
WPAGroup Key Update Interval	Indicates the interval of key upgrade. By default, it is 600s.
WPA Encryption Algorithm	Indicates the WPA encryption algorithm. The available options are **AES**, **TKIP**, and **TKIP+AES**.

The available options of **Authentication Type** are **Open System**, **WPA-PSK**, **WPA-EAP**, **WEP**, **WAPI-PSK**, and **WAPI-CERT**.

- If **Authentication Type** is set to **Open System**, it indicates no encryption.

- WPA-PSK

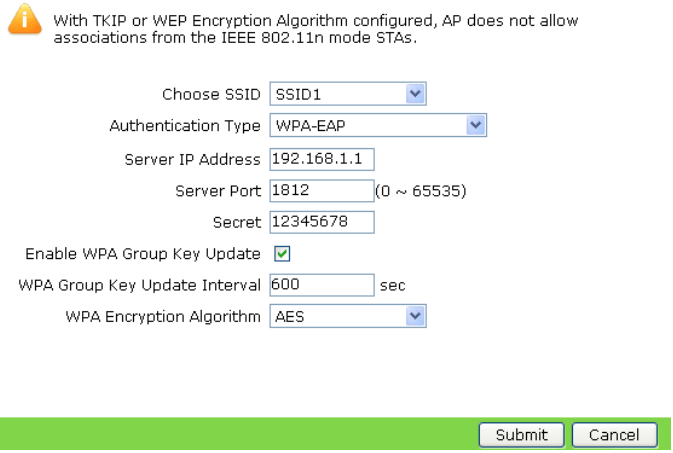
  WPA refers to Wi-Fi protected access, including WPA-PSK, WPA2-PSK, and WPA/WPA2-PSK.

  a. On the page as shown in the above figure, select **WPA-PSK**, **WPA2-PSK**, or **WPA/WPA2-PSK** from the **Authentication Type** drop-down list to enable WPA-PSK encryption.

  b. Refer to the above table to set the parameters.

- WPA-EAP

  a. Select **WPA-EAP**, **WPA2-EAP**, or **WPA/WPA2-EAP** from the **Authentication Type** drop-down list to enable WPA-EAP encryption, as shown in the following figure.



  b. Refer to the above table to set the parameters.

  → **Server Type**: Indicates the type of the authentication server. The available options are **Master Auth Server**, **Master Acct Server**, **Backup Auth Server**, and **Backup Acct Server**. By default, it is **Master Auth Server**.

  → **Server IP Address**: Indicates the IP address of the authentication server, such as 192.168.1.1.

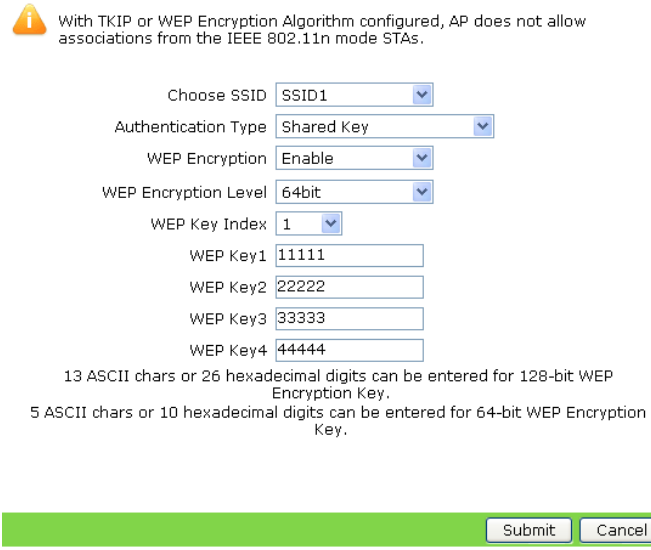
  → **Server Port**: Indicates the port of the authentication server. It ranges from 0 to 65535. For example, the port is 1812.

  → **Secret**: Indicates the WPA-EAP encryption key. It consists of 8 to 63 characters.

- WEP

  WEP refers to wired equivalent privacy. It is one of WLAN security protocols that are used widely.

  a. Select **Shared Key** or **Open System & Shared Key** from the **Authentication Type** drop-down list, as shown in the following figure.

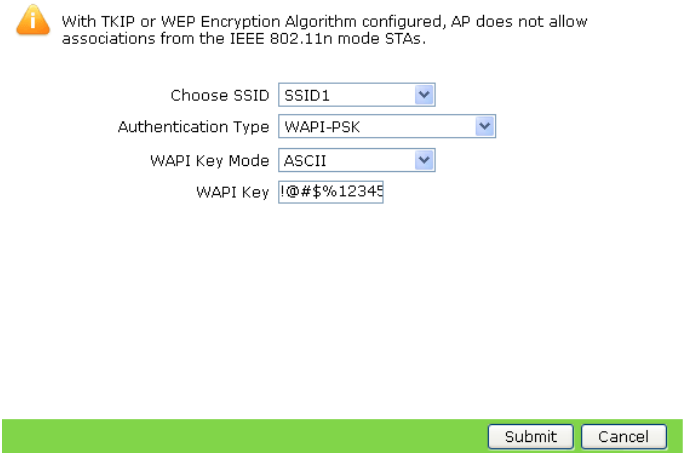


  b. Refer to the following table to set the parameters.

Parameter	Description
WEP Encryption	Enables or disables WEP encryption. By default, this function is enabled.
WEP Encryption Level	Indicates the length of WEP key. The available options are **64bit** and **128bit**.
WEP Key Index	Indicates the key value.
WEP Key (1-4)	Indicates the key values of WEP encryption. A 64-bit WEP key supports 5 ASCII characters or 10 hexadecimal characters. A 128-bit WEP key supports 13 ASCII characters or 26 hexadecimal characters.

- WAPI-PSK

  a. Select **WAPI-PSK** from the **Authentication Type** drop-down list, as shown in the following figure.

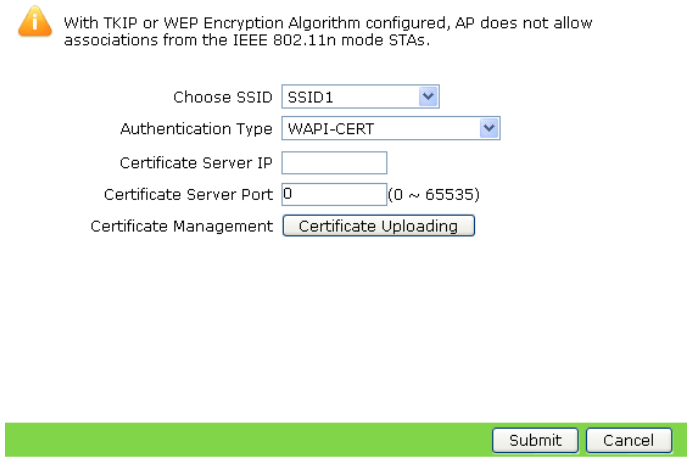


  b. Refer to the following table to set the parameters.

Parameter	Description
WAPI Key Mode	Indicates the WAPI key mode. The available options are **ASCII** and **HEX**. By default, it is **ASCII**.
WAPI Key	Indicates the key values of WAPI encryption.

- WAPI-CERT

  a. Select **WAPI-CERT** from the **Authentication Type** drop-down list, as shown in the following figure.



b. Set **Certificate Server IP** and **Certificate Server Port**.

c. Click **Certificate Uploading**. On the page that is displayed, select the required certificate file and click **Upload**.

Note:

The types of certificate file include AS, AP, and CA. If the AP and CA certificates are required, upload the AP certificate first. Otherwise, upload the AS certificate first.

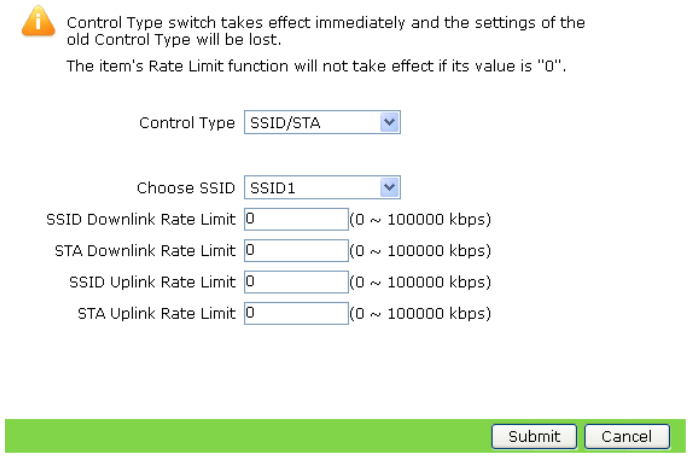
3. Click **Submit** to submit the current settings.

6.2.4 Setting Rate Limit

Note:

If the rate limit is set to 0, it indicates that the traffic is not limited.

1. Choose [**Network→WLAN→Rate Limit**] from the main menu. The **Rate Limit** page is displayed, as shown in the following figure.



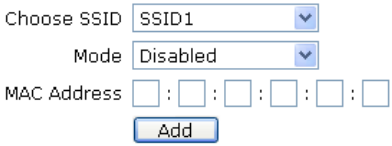
2. Refer to the following table to set the parameters.

Parameter	Description
Control Type	The available options are **SSID/STA** and **MAC**. By default, it is **SSID/STA**. The switching of control mode will take effect immediately and the original control mode is cleared.
Choose SSID	Indicates the SSID. It ranges from SSID1 to SSID16.
SSID Downlink Rate Limit	It ranges from 0 to 100000 kbps. By default, it is 0, which indicates that the traffic is not limited.
STA Downlink Rate Limit	It ranges from 0 to 100000 kbps. By default, it is 0, which indicates that the traffic is not limited.
SSID Uplink Rate Limit	It ranges from 0 to 100000 kbps. By default, it is 0, which indicates that the traffic is not limited.
STA Uplink Rate Limit	It ranges from 0 to 100000 kbps. By default, it is 0, which indicates that the traffic is not limited.

3. Click **Submit** to submit the current settings.

6.2.5 Setting ACL Parameters

1. Choose [**Network→WLAN→Access Control list**] from the main menu. The **Access Control list** page is displayed, as shown in the following figure.



2. Refer to the following table to set the parameters.

Parameter	Description
Choose SSID	Indicates the SSID. It ranges from SSID1 to SSID16.
Mode	The available options are **Disabled**, **Forbid**, and **Allow**, which indicate that SSID channel control is not implemented, and device connections with the required MAC addresses are forbidden and allowed respectively. By default, SSID channel control is not implemented.
MAC Address	Indicates the MAC address of the device to be controlled.
Delete	Clicks to delete the required control channel item.

3. Click **Add** to submit the current settings.

6.2.6 Viewing Associated Device Information

1. Choose [**Network→WLAN→Associated Devices**] from the main menu. The **Associated Devices** page is displayed, as shown in the following figure.

2. Select the required SSID from the **Choose SSID** drop-down list. Then, view the details of the associated devices corresponding to the selected SSID. By default, the system displays the details of the associated devices corresponding to SSID1.

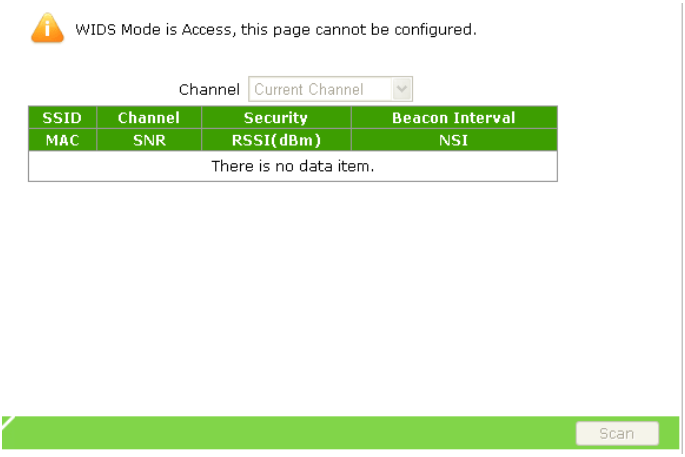
Note:

Click **Refresh** refresh the current settings of the device.

6.2.7 Scanning an AP

The required SSID needs to be enabled.

1. Choose [**Network→WLAN→AP Scanning**] from the main menu. The **AP Scanning** page is displayed, as shown in the following figure.



2. Select the required channel from the **Channel** drop-down list.

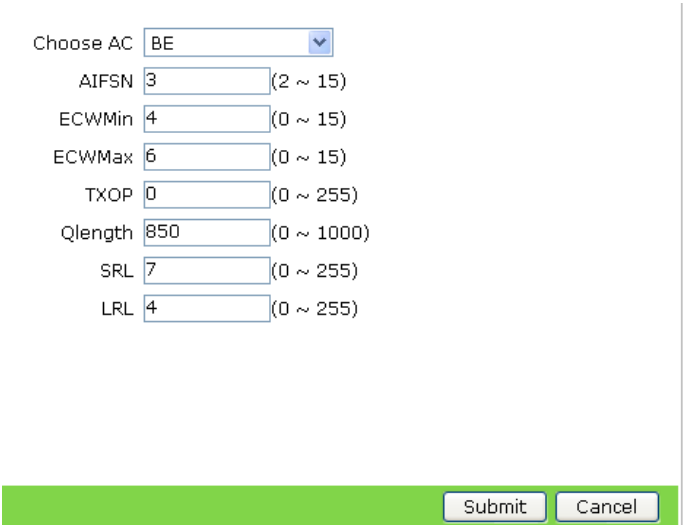
Note:

This page cannot be displayed if the SSID is not enabled or **WIDS** is set to **Access**.

3. Click **Scan**. Then, the scanning result is displayed on the page.

6.2.8 Setting WMM Parameters

1. Choose [**Network→WLAN→WMM**] from the main menu. The **WMM** page is displayed, as shown in the following figure.



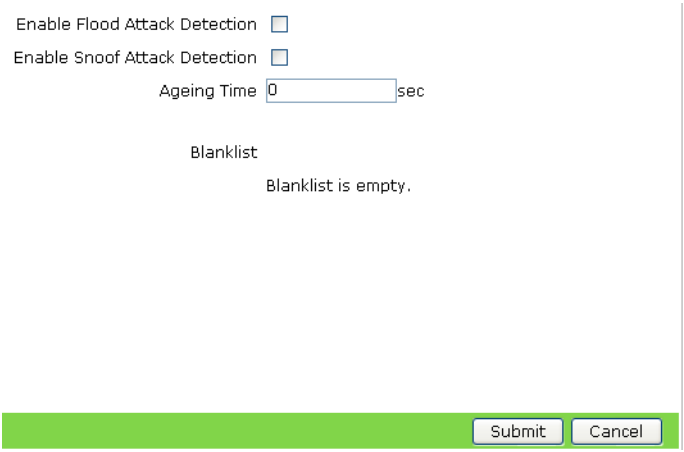
2. Refer to the following table to set the parameters.

Parameter	Description
Choose AC	The available options are **VO**, **VI**, **BE**, and **BK**.
AIFSN	It ranges from 2 to 15.
ECWMin	It ranges from 0 to 15.
ECWMax	It ranges from 0 to 15.
TXOP	It ranges from 0 to 255.
Qlength	It ranges from 0 to 1000.
SRL	It ranges from 0 to 255.
LRL	It ranges from 0 to 255.

3. Click **Submit** to submit the current settings.

6.2.9 Setting Anti-Attack Test Parameters

1. Choose [**Network→WLAN→Anti-Attack Test**] from the main menu. The **Anti-Attack Test** page is displayed, as shown in the following figure.



2. Refer to the following table to set the parameters.

Parameter	Description
Enable Flood Attack Detection	Enables or disables the function of flood attack detection.
Enable Snoof Attack Detection	Enables or disables the function of snooping attack detection.
Aging Time	Indicates the aging time. By default, it is 0s.
Blanklist	Displays the details of the blacklist.

3. Click **Submit** to submit the current settings.

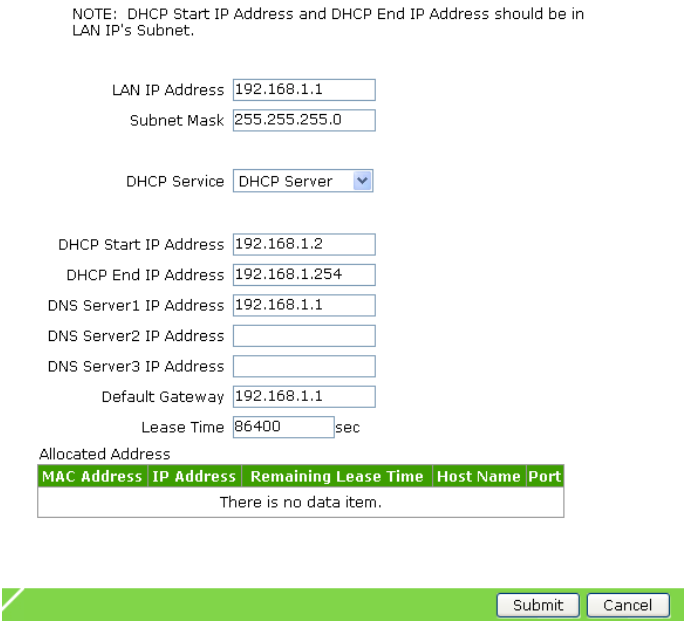
6.3 Address Management

6.3.1 Managing Addresses

Note:

The start and end IP addresses of DHCP must be in the LAN IP subnet.

1. Choose [**Network→LAN→Address Management**] from the main menu. The **Address Management** page is displayed, as shown in the following figure.


NOTE: DHCP Start IP Address and DHCP End IP Address should be in LAN IP's Subnet.
LAN IP Address 192.168.1.1
Subnet Mask 255.255.255.0
DHCP Service DHCP Server
DHCP Start IP Address 192.168.1.2
DHCP End IP Address 192.168.1.254
DNS Server1 IP Address 192.168.1.1
DNS Server2 IP Address
DNS Server3 IP Address
Default Gateway 192.168.1.1
Lease Time 86400 sec
Allocated Address
MAC Address IP Address Remaining Lease Time Host Name Port
There is no data item.
Submit Cancel

2. Refer to the following table to set the parameters.

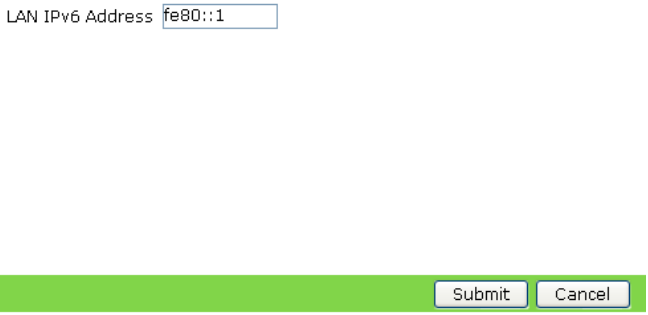
Parameter	Description
LAN IP Address	Indicates the IP address of LAN group (interface subnet). By default, it is 192.168.1.1.
Subnet Mask	Indicates the subnet mask of LAN group.
DHCP Service	The available options are **DHCP Server**, **DHCP Relay**, and **Disabled**. By default, it is **DHCP Server**.
DHCP Start IP Address	Indicates the start IP address allocated for the DHCP server. To change the start IP address or end IP address, make sure that the address is in the same network segment as the IP address of the ZXV10 W811N.
DHCP End IP Address	Indicates the end IP address allocated for the DHCP server. To change the start IP address or end IP address, make sure that the address is in the same network segment as the IP address of the ZXV10 W811N.
DNS1-3	Indicates the IP addresses of the DNS server. Up to three IP addresses are supported.
Default Gateway	Indicates the default gateway. By default, it is 192.168.1.1.

Parameter	Description
Lease Time	Indicates the lease time, that is, the time of the DHCP server in leasing the IP address. The unit is second. By default, it is 86400s. The lease time refers to the time of the client in leasing an IP address from the IP address pool that supports dyna mic allocation. When the lease time expires, the server can lease or require a new IP address through the DHCP server.
Allocated Address	Indicates the allocated addresses. The page displays the allocated addresses and the basic information of the devices that use these addresses.

3. Click **Submit** to submit the current settings.

6.3.2 Managing IPv6 Addresses

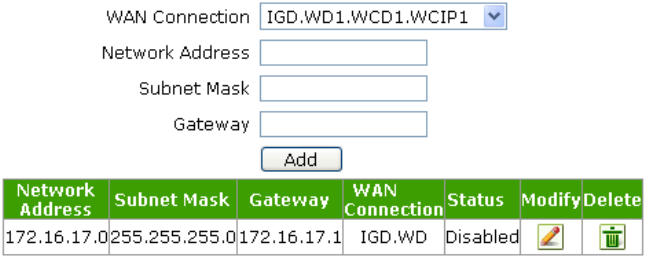
1. Choose [**Network→LAN→IPv6 Address Management**] from the main menu. The **IPv6 Address Management** page is displayed, as shown in the following figure.



2. Re-configure the IPv6 address of the terminal.
3. Click **Submit** to submit the current settings.

6.4 Setting Static Routing Parameters

1. Choose [**Network→Routing→Static Routing**] from the main menu. The **Static Routing** page is displayed, as shown in the following figure.



2. Refer to the following table to set the parameters.

Parameter	Description
WAN Connection	Selects the required interface.
Network Address	Indicates the destination network address to be accessed.
Subnet Mask	Indicates the subnet mask of the destination network address to be accessed.
Gateway	Indicates the gateway (next hop) IP address.
Modify	Clicks to edit the required static routing rule.
Delete	Clicks to delete the required static routing rule.

3. Click **Add** to submit the current settings.

6.5 Enabling IPv6

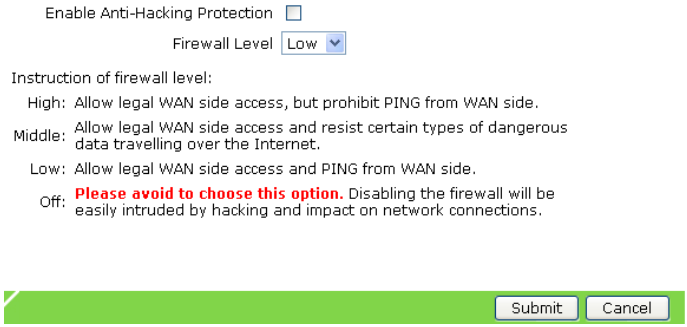
1. Choose [**Network→IPv6 Enable→IPv6 Enable**] from the main menu. The **IPv6 Enable** page is displayed, as shown in the following figure.

2. Select the **IPv6 Enable** check box.
3. Click **Submit** to submit the current settings.

7 Safety Configuration

7.1 Setting Firewall Parameters

1. Choose [**Security→Firewall**] from the main menu. The **Firewall** page is displayed, as shown in the following figure.


Enable Anti-Hacking Protection
Firewall Level
Low
Instruction of firewall level:
High: Allow legal WAN side access, but prohibit PING from WAN side.
Middle: Allow legal WAN side access and resist certain types of dangerous data travelling over the Internet.
Low: Allow legal WAN side access and PING from WAN side.
Off: Please avoid to choose this option. Disabling the firewall will be easily intruded by hacking and impact on network connections.
Submit
Cancel

2. Refer to the following table to set the parameters.

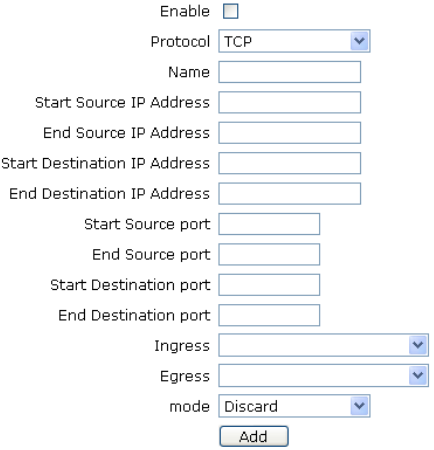
Parameter	Description
Enable Anti-Hacking Protection	Enables or disables the function of anti-attack protection.
Firewall Level	The available options are **High**, **Medium**, **Low**, and **Disabled**. The firewall levels are described as follows: ● **High**: Legal WAN accesses are allowed and ping operation at the WAN side is forbidden. ● **Medium**: Legal WAN accesses are allowed and attacks of certain risky data streams on the Internet can be avoided. ● **Low**: Legal WAN accesses are allowed and ping operation at the WAN side is allowed. ● **Disabled**: It is not recommended to use this parameter. After the firewall is shut down, the computer is easy to be attacked and the Inter net surfing is affected.

3. Click **Submit** to submit the current settings.

7.2 Setting IP Address Filter

AP Mode of the device is set to **Fat**.

1. Choose [**Security→IP Filter**] from the main menu. The **IP Filter** page is displayed, as shown in the following figure.



Enable	Name	Start Source IP Address	Start Source port	Start Destination IP Address	Start Destination port	Ingress	Modify	Delete
Protocol	mode	End Source IP Address	End Source port	End Destination IP Address	End Destination port	Egress		
1	udp	192.168.0.62	1	10.42.77.170	1	LAN		
UDP	Discard	192.168.0.69	65535	10.42.77.178	65535	IGD.WD1.		

2. Refer to the following table to set the parameters.

Parameter	Description
Enable	Enables or disables the function of IP address filter.
Protocol	Indicates the protocol name. The available options are **ANY**, **TCP**, **UDP**, **TCP ANDUDP**, and **ICMP**. Wherein, **ANY** indicates any protocol.
Name	Indicates the name of IP filter. It consists of 1 to 256 characters.
Start Source IP Address	Indicates the IP address of the start source (LAN side).
End Source IP Address	Indicates the IP address of the end source (LAN side).
Start Destination IP Address	Indicates the start destination IP address.
End Destination IP Address	Indicates the end destination IP address.
Start Source port	Indicates the port of the IP address of the start source (LAN side).

Parameter	Description
End Source port	Indicates the port of the IP address of the end source (LAN side).
Start Destination port	Indicates the port of the start destination IP address.
End Destination port	Indicates the port of the end destination IP address.
Ingress	Indicates the ingress interface. The available options are **LAN**, **WAN Connections**, and **Null**. By default, it is null, which indicates any interface.
Egress	Indicates the egress interface. The available options are **LAN**, **WAN Connections**, and **Null**. By default, it is null, which indicates any interface.
mode	Selects a mode. The available options are **Access** and **Discard**.
Modify	Clicks to modify the required IP filter rule.
Delete	Clicks to delete the required IP filter rule.

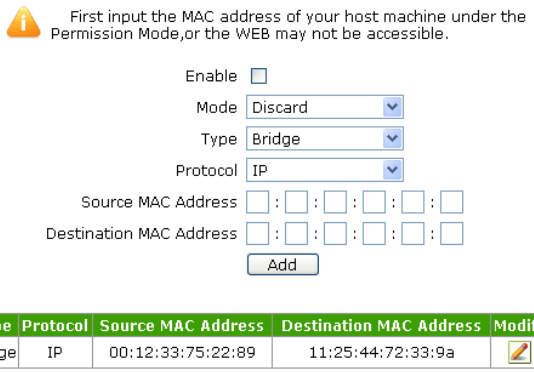
3. Click **Add** to submit the current settings.

7.3 Setting MAC Filter

Note:

In **Access** mode, you need to enter the MAC address of the local computer. Otherwise, accessing the network fails.

1. Choose [**Security→MAC Filter**] from the main menu. The **MAC Filter** page is displayed, as shown in the following figure.



2. Refer to the following table to set the parameters.

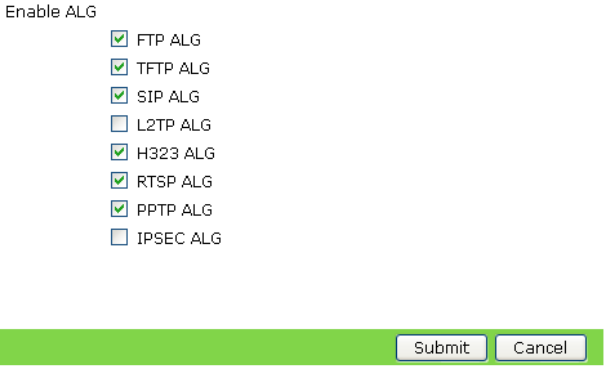
Parameter	Description
Enable	Enables or disables the function of MAC filter. By default, this function is disabled.
Mode	Selects a mode. The available options are **Access** and **Discard**.
Type	Selects a type. The available options are **Bridge**, **Route**, and **Bridge + Route**.
Protocol	Indicates the protocol name. The available options are **IP**, **ARP**, **RARP**, **PPPoE**, and **All**.
Source MAC Address	Indicates the MAC address of the device at the LAN side.
Destination MAC Address	Indicates the MAC address of the device at the WAN side.
Modify	Clicks to modify the required MAC filter rule.
Delete	Clicks to delete the required MAC filter rule.

3. Click **Add** to submit the current settings.

7.4 Setting ALG Switch

AP Mode of the device is set to **Fat**.

1. Choose [**Security→ALG**] from the main menu. The **ALG Switch** page is displayed, as shown in the following figure.



2. Enable or disable the ALG switch as required.
3. Click **Submit** to submit the current settings.

8 Application Configuration

8.1 Setting UPnP

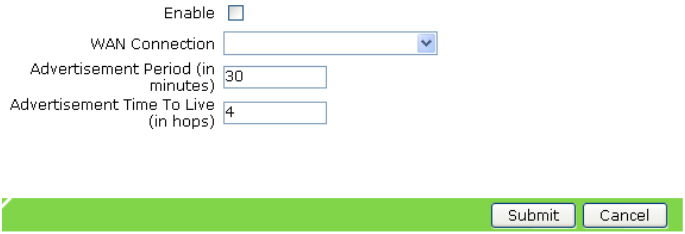
AP Mode of the device is set to **Fat**.

The universal plug and play (UPnP) supports network connection with zero configuration and automatic discovery of various network devices.

When the UPnP function is enabled, the devices that support this function are allowed to dynamically access the network, obtain IP addresses, and transmit their performance data. If the DHCP and DNS servers are available in the network, the devices can automatically obtain DHCP and DNS services.

A device that supports the UPnP function can automatically get out of the network, which does not affect the device itself or other devices in the network.

1. Choose [**Application→UPnP**] from the main menu. The **UPnP** page is displayed, as shown in the following figure.



2. Refer to the following table to set the parameters.

Parameter	Description
Enable	Enables or disables the UPnP function. By default, this function is disabled.
WAN Connection	Selects the required WAN connection.
Advertisement Period	Sets the required time. The unit is minute.
Advertisement Time to Live (in hops)	Sets the required live time (in hops). For example, it is 4.

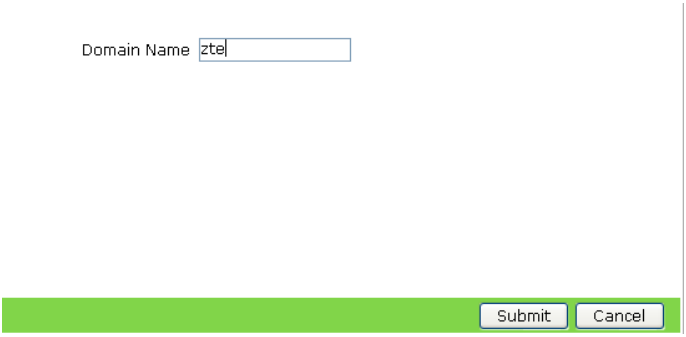
3. Click **Submit** to submit the current settings.

8.2 Setting Device Naming Parameters

AP Mode of the device is set to **Fat**.

1. Set a domain name.

a. Choose [**Application→DNS Service→Domain Name**] from the main menu. The **Domain Name** page is displayed, as shown in the following figure.

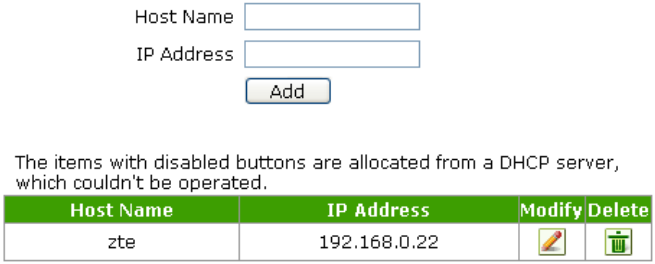


b. In the **Domain Name** text box, enter a domain name, for example, **ZTE**.

c. Click **Submit** to submit the current settings.

2. Set a host name.

a. Choose [**Application→DNS Service→Hosts**] from the main menu. The **Hosts** page is displayed, as shown in the following figure.



b. In the **Host Name** and **IP Address** text boxes, enter a host name and the IP address of the host.

c. Click **Add** to submit the current settings.

Note:

The instance contents in gray are dynamically obtained at the DHCP side and require no operations.

- Clicks to edit the host name.
- Clicks to delete the host name.

8.3 QoS Settings

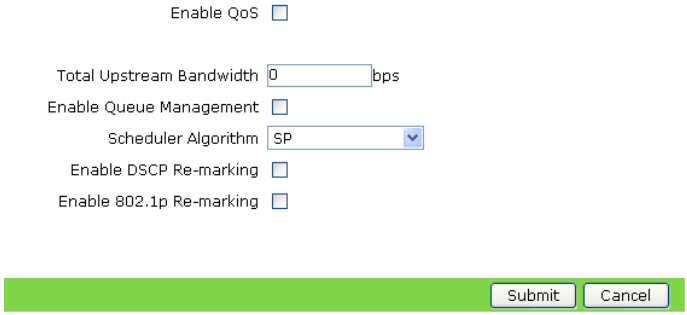
When **AP Mode** of the device is set to **Fat**, the QoS settings are available.

The quality of service (QoS) refers to the service conventions for message transmission and sharing among network users. For example, QoS includes allowable time of transmission delay, minimum degree of distortion of presence, and audio and video synchronization.

In the QoS framework, the concept of class of service is introduced to QoS mapping. After QoS is enabled, the ZXV10 W811N can completely control the data packets in both ingress and egress directions. For the data packets in the ingress direction, the domain mapping (ToS and priority) needs to be converted to queue. For the data packets in the egress direction, the queue needs to be converted to domain mapping.

8.3.1 Setting Basic Parameters of QoS

1. Choose [**Application→QoS→Basic**] from the main menu. The **Basic** page is displayed, as shown in the following figure.



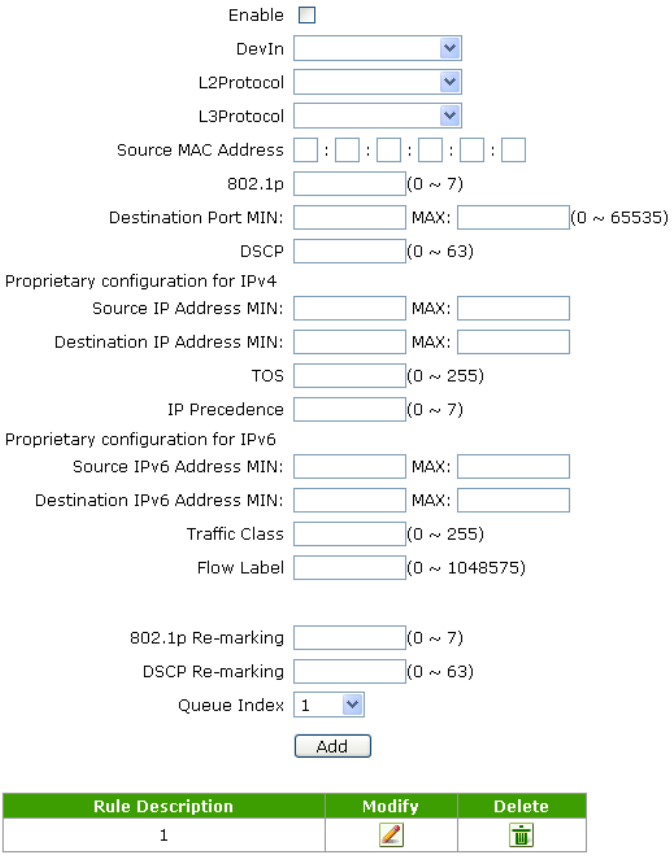
2. Refer to the following table to set the parameters.

Parameter	Description
Enable QoS	Enables or disables the QoS function.
Total Upstream Bandwidth	Indicates the total upstream bandwidth.
Enable Queue Management	Enables or disables the function of queue management. By default, this function is disabled.
Scheduler Algorithm	The available options are **SP**, **DWRR**, and **SP_DWRR**. **SP**: The packets in the queue are transmitted by strictly following the priority sequence in descending order. When the queue of high priority is empty, the packets in the queue of low priority are transmitted. **DWRR**: Indicates dynamic weighted round-robin. In this mode, scheduling is implemented among queues in turn to ensure each queue can obtain a period of service time.
Enable DSCP Re-marking	Enables or disables the function of DSCP re-marking. By default, this function is disabled.
Enable 802.1p Re-marking	Enables or disables the function of 802.1p priority re-marking. By default, this function is disabled.

3. Click **Submit** to submit the current settings.

8.3.2 Setting Classification Rules

1. Choose [**Application→QoS→Classification**] from the main menu. The **Classification** page is displayed, as shown in the following figure.



2. Refer to the following table to set the parameters.

Parameter	Description
Enable	Enables or disables the function of setting QoS classification rules.
DevIn	Indicates the ingress interface for receiving packets. The available options are LAN or existing SSIDs. You can select only one type of interface.
L2Protocol	Indicates the type of the layer-2 protocol of packets. The available options are **IPv4**, **IPv6**, **ARP**, and **PPPoE**.
L3Protocol	Indicates the type of the layer-3 protocol of packets. The available options are **TCP**, **UDP**, and **ICMP**.

Parameter	Description
Source MAC Address	Indicates the source MAC address of packets.
802.1p	Indicates the tag value (user priority) of VLAN packets. It ranges from 0 to 7. The value 0 indicates that the priority is not set. The greater the value, the higher the priority.
Destination Port MIN/MAX	Indicates the upper and lower thresholds for the destination port of packets. This parameter ranges from 0 to 65535.
DSCP	Indicates the DSCP value. It ranges from 0 to 63.
802.1p Re-marking	Indicates the re-marking value of the 802.1p priority. It ranges from 0 to 7. The value 0 indicates that the priority is not set. The greater the value, the higher the priority.
DSCP Re-marking	Indicates the value of DSCP re-marking. It ranges from 0 to 63.
Queue Index	Indicates the management queue index. It ranges from 1 to 8.
Modify	Clicks to modify the required rule.
Delete	Clicks to delete the required rule.
Proprietary configuration for IPv4	
Source IP Address MIN/MAX	Indicates the upper and lower thresholds for the source IP address of packets.
Destination IP Address MIN/MAX	Indicates the upper and lower thresholds for the destination IP address of packets.
TOS	Indicates the service type field of data packets. It ranges from 0 to 255.
IP Precedence	Indicates the IP priority. It ranges from 0 to 7. The value 0 indicates that the priority is not set. The greater the value, the higher the priority.
Proprietary configuration for IPv6	
Source IPv6 Address MIN/MAX	Indicates the upper and lower thresholds for the source IPv6 address of packets.
Destination IPv6 Address MIN/MAX	Indicates the upper and lower thresholds for the destination IPv6 address of packets.
Traffic Class	Indicates the traffic type. It ranges from 0 to 255.
Flow Label	Indicates the flow label. It ranges from 0 to 1048575.

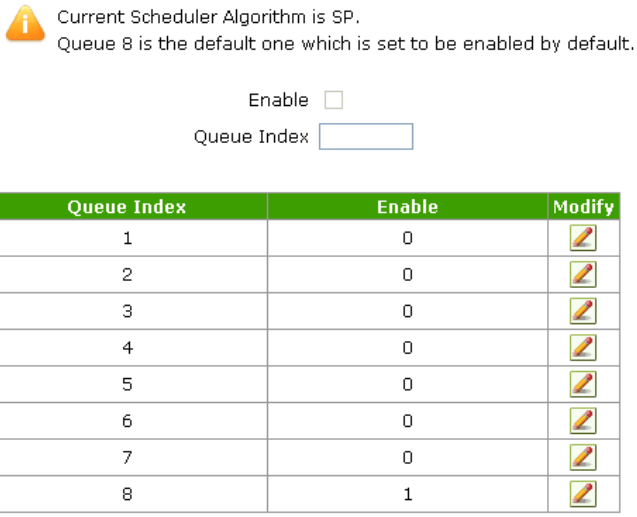
3. Click **Add** to submit the current settings.

8.3.3 Setting Queue Management Parameters

Note:

The default queue management algorithm of the system is SP. Queue 8 is the default queue and is enabled by default.

1. Choose [**Application→QoS→Queue Management**] from the main menu. The **Queue Management** page is displayed, as shown in the following figure.



2. Refer to the following table to set the parameters.

Parameter	Description
Enable	Enables or disables the function of QoS queue configuration.
Queue Index	Indicates the queue index. It ranges from 1 to 8. By default, only queue 8 is enabled.

3. Click next to the required queue. In the **Enable** option, set whether to enable the queue.
4. Click **Modify** to submit the current settings.

8.4 Setting Time Management Parameters

You can synchronize the time from the time server by setting the time management parameters on the device.

1. Choose [**Application→Time Management**] from the main menu. The **Time Management** page is displayed, as shown in the following figure.

Current Date and Time 2000-01-01T00:46:08
Time Zone (GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi, I
Primary NTP Server Address
Secondary NTP Server Address
Poll Interval 86400 sec
Enable Daylight Saving Time
DSCP (0 ~ 63)
Submit
Cancel

2. Refer to the following table to set the parameters.

Parameter	Description
Current Date and Time	Displays the current date and time of the device.
Time Zone	Selects the time zone to which the device belongs according to the actual condition.
Primary NTP Server Address	Sets the address or domain name of the primary NTP server.
Second NTP Server Address	Sets the address or domain name of the secondary NTP server.
Poll Interval	Indicates the interval of synchronizing server time. By default, it is 86400s.
Enable Daylight Saving Time	Enables or disables the DST function. By default, this function is disabled.
DSCP	Indicates the DSCP value. It ranges from 0 to 63.

3. Click **Submit** to submit the current settings.

8.5 IGMP Settings

The multicast supports sending a same data packet to multiple devices.

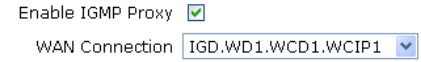
An IP host uses the Internet Group Management Protocol (IGMP) to report multicast member information to neighbor routers. Meanwhile, a multicast router uses the IGMP protocol to learn which hosts belong to the same multicast group.

The device supports the IGMP proxy for processing IGMP packets. After the IGMP proxy is enabled, a LAN host can request being added to or leaving the multicast group. A multicast router can act as a proxy to send multicast packets to a multicast group at the WAN side.

8.5.1 Setting IGMP Proxy

AP Mode of the device is set to **Fat**.

1. Choose [**Application→IGMP→IGMP Proxy**] from the main menu. The **IGMP Proxy** page is displayed, as shown in the following figure.



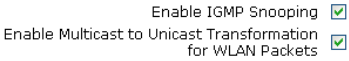
2. Refer to the following table to set the parameters.

Parameter	Description
Enable IGMP Proxy	Enables or disables the function of IGMP proxy.
WAN Connection	Selects the required WAN connection.

3. Click **Submit** to submit the current settings.

8.5.2 Setting IGMP Snooping Parameters

1. Choose [**Application→IGMP→IGMP Snooping**] from the main menu. The **IGMP Snooping** page is displayed, as shown in the following figure.



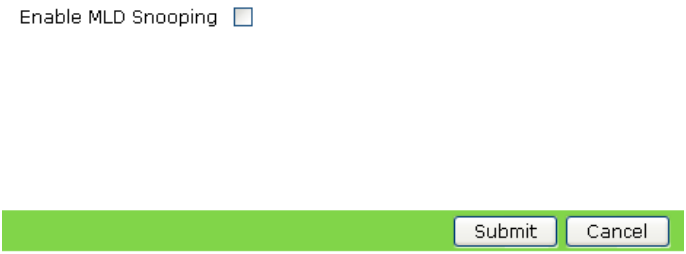
2. Refer to the following table to set the parameters.

Parameter	Description
Enable IGMP Snooping	Enables or disables the function of IGMP snooping. By default, this function is enabled.
Enable Multicast to Unicast Transformation for WLAN Packet	Enables or disables the function of converting multicast packets to unicast packets through WLAN interface. By default, this function is enabled.

3. Click **Submit** to submit the current settings.

8.6 Setting MLD Snooping Parameters

1. Choose [**Application→MLD Snooping**] from the main menu. The **MLD Snooping** page is displayed, as shown in the following figure.

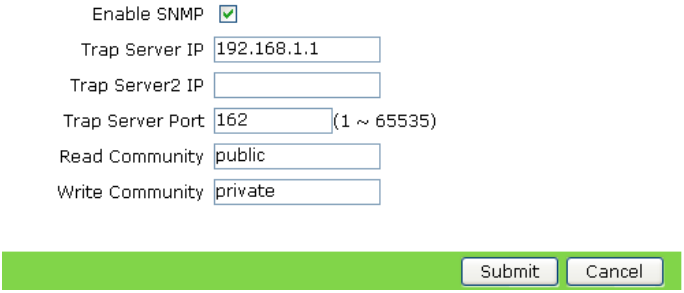


2. Enable or disable the function of MLD snooping.
3. Click **Submit** to submit the current settings.

9 Management Configuration

9.1 Managing SNMP Parameters

1. Choose [**Administration→SNMP**] from the main menu. The **SNMP** page is displayed, as shown in the following figure.



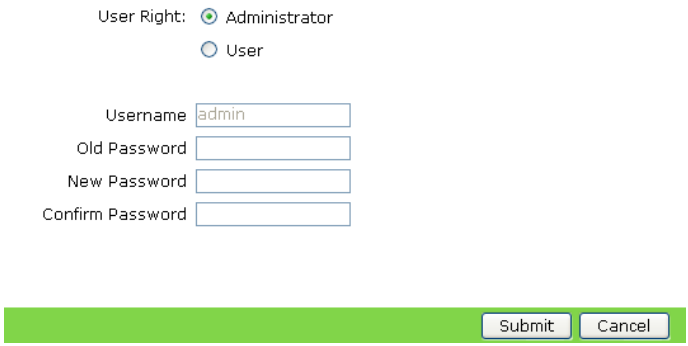
2. Refer to the following table to set the parameters.

Parameter	Description
Enable SNMP	Enables or disables the SNMP function.
Trap Server IP	Indicates the IP address of the alarm server, for example, 192.168.1.1.
Trap Server2 IP	Indicates the IP address of the backup alarm server.
Trap Server Port	Indicates the port of the alarm server. It ranges from 1 to 65535.
Read Community	By default, it is **public**.
Read Community	By default, it is **private**.

3. Click **Submit** to submit the current settings.

9.2 Managing Users

1. Choose [**Administration→User Management**] from the main menu. The **User Management** page is displayed, as shown in the following figure.



2. Refer to the following table to set the parameters.

Parameter	Description
User Right	Selects **Administrator** or **User**.
User Name	Indicates the user name. The user name of the administrator is **admin**, which cannot be changed. The user name of the common user is **user**, which can be changed.
Old Password	Indicates the old password required during password change.
New Password	Indicates the new password required during password change.
Confirm Password	Indicates the new password required during password change for confirmation.

3. Click **Submit** to submit the current settings.

9.3 Device Management

9.3.1 Setting System Management Parameters

1. Choose [**Administration→System Management→System Management**] from the main menu. The **System Management** page is displayed, as shown in the following figure.

Click this button to reboot the device.
Reboot
Click this button to restore the configuration to factory default settings. The device will be automatically rebooted.
Restore Default

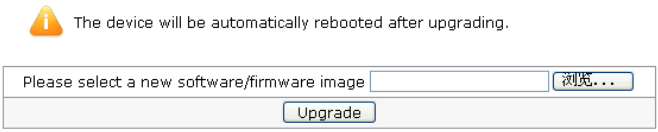
2. Soft rest the device or restore the default settings of the device.
   - Click **Reboot** to restart the device.
   - Click **Restore Default** to restore the default settings of the device and then restart the device.

9.3.2 Setting Version Upgrade Parameters

Note:

During software upgrade of the device, pay attention to the prompts displayed on the page and wait patiently. Do not power off or restart the device. Otherwise, the device may be damaged.

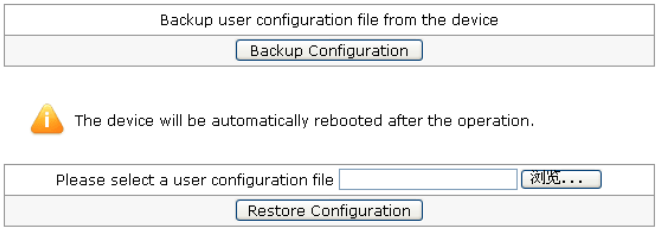
1. Choose [**Administration→System Management→Software Upgrade**] from the main menu. The **Software Upgrade** page is displayed, as shown in the following figure.



2. Click **Browse** to select the required software version file.
3. Click **Upgrade** to upgrade the software version file.

9.3.3 Managing User Settings

1. Choose [**Administration→System Management→User Configuration Management**] from the main menu. The **User Configuration Management** page is displayed, as shown in the following figure.


Backup user configuration file from the device
Backup Configuration
The device will be automatically rebooted after the operation.
Please select a user configuration file
浏览...
Restore Configuration

2. Select the required backup configuration file or import a configuration file.

   - Exporting a configuration file

     Click **Backup Configuration** to back up the configuration file of the device.

   - Importing a configuration file

     a. Click **Browse** to select the required configuration file of the device.

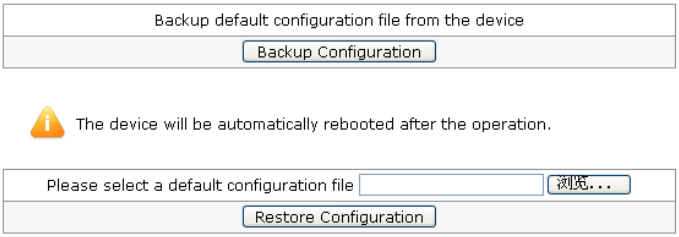
     b. Click **Restore Configuration** to import the configuration file of the device.

     Note:

     After this operation is performed, the device will automatically restart.

9.3.4 Managing Default Settings

1. Choose [**Administration→System Management→Default Configuration Management**] from the main menu. The **Default Configuration Management** page is displayed, as shown in the following figure.


Backup default configuration file from the device
Backup Configuration
The device will be automatically rebooted after the operation.
Please select a default configuration file
浏览...
Restore Configuration

2. Select the required backup default configuration file or import a default configuration file.

   - Exporting a default configuration file

     Click **Backup Configuration** to back up the default configuration file of the device.

   - Importing a default configuration file

     a. Click **Browse** to select the required default configuration file of the device.

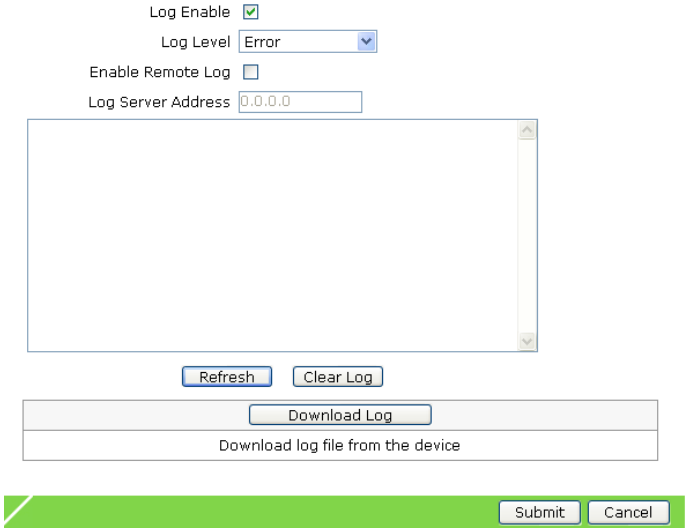
     b. Click **Restore Configuration** to import the default configuration file of the device.

     Note:

     After this operation is performed, the device will automatically restart.

9.4 Setting Log Management Parameters

1. Choose [**Administration→Log Management**] from the main menu. The **Log Management** page is displayed, as shown in the following figure.



2. Refer to the following table to set the parameters.

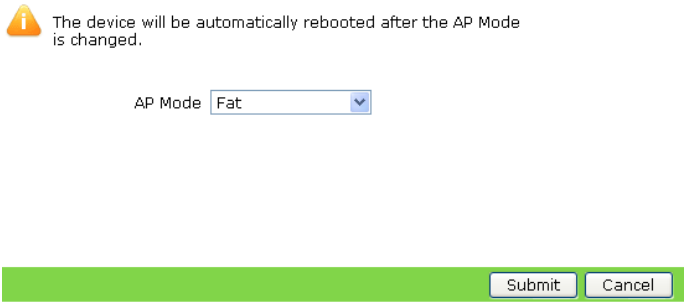
Parameter	Description
Log Enable	Enables or disables the function of log server management. By default, this function is disabled.
Log Level	Indicates the log level. The levels from low to high are Debug, Informational, Notice, Warning, Error, Critical, Alert, and Emergency. After the log level is set, only the logs of this level or above are kept.
Enable Remote Log	Enables or disables the function of remote login to log server. By default, this function is disabled.
Log Server Address	Indicates the IP address of the remote log server.

3. Click **Submit**. Then, the log information of the corresponding level is displayed on the page.
   - Click **Refresh** to refresh the current log records.
   - Click **Clear Log** to clear the current log records.
   - Click **Download Log** to download the required log records to the local disk.

9.5 AP Management

9.5.1 Setting AP Mode

1. Choose [**Administration→AP Management→AP Mode**] from the main menu. The **AP Mode** page is displayed, as shown in the following figure.



2. Select the required AP mode (**Fat** or **Fit**). By default, the AP mode is **Fit**.

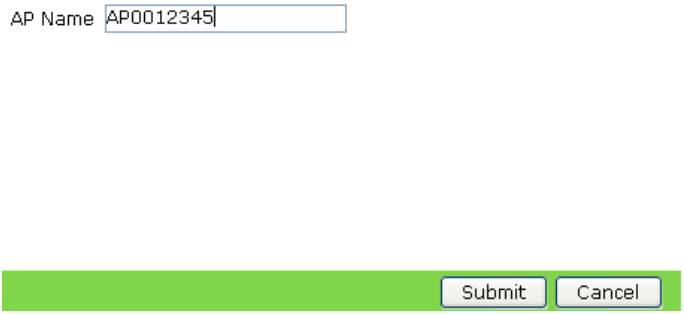
   Note:

   After the AP mode is switched, the device will automatically restart.

3. Click **Submit** to submit the current settings.

9.5.2 Setting AP Name

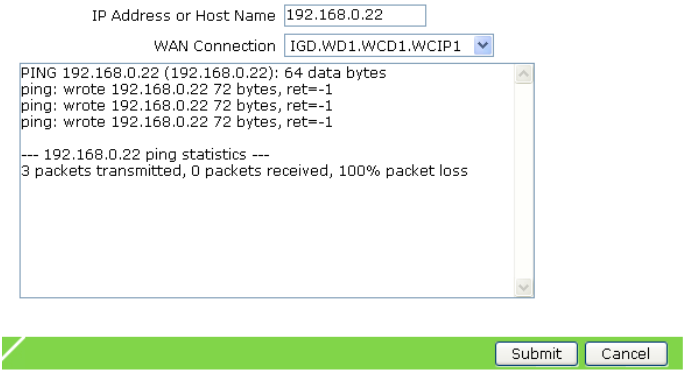
1. Choose [**Administration→AP Management→AP Name**] from the main menu. The **AP Name** page is displayed, as shown in the following figure.



2. In the **AP Name** text box, enter the required AP name.
3. Click **Submit** to submit the current settings.

9.6 Setting Ping Diagnosis Parameters

1. Choose [**Administration→Diagnosis→Ping Diagnosis**] from the main menu. The **Ping Diagnosis** page is displayed, as shown in the following figure.


IP Address or Host Name
192.168.0.22
WAN Connection
IGD.WD1.WCD1.WCIP1
PING 192.168.0.22 (192.168.0.22): 64 data bytes
ping: wrote 192.168.0.22 72 bytes, ret=-1
ping: wrote 192.168.0.22 72 bytes, ret=-1
ping: wrote 192.168.0.22 72 bytes, ret=-1
--- 192.168.0.22 ping statistics ---
3 packets transmitted, 0 packets received, 100% packet loss
Submit
Cancel

2. In the **IP Address or Host Name** text box, enter the host IP address or host name.
3. Select the required WAN connection used by the host from the **WAN Connection** drop-down list.
4. Click **Submit**. Then, the ping result is displayed in the lower text box.

A FAQ

During the installation or use of the ZXV10 W811N, some problems may occur. In this case, refer to the following solutions to solve the problems. If some problems still persist, contact the corresponding carrier for help.

Question	Solution
How to obtain the MAC address of a device?	The MAC address is the unique ID of a network device. You can obtain the MAC address of a network device in the following two ways. ● On the bottom of each device, there is a small label. This label provides the MAC address of the device. ● Log in to the Web page of the device and click the basic info rmation of sets to learn the MAC address of the wireless AP.
Why does the STP fail to connect to the AP?	Usually, an STA needs to search for available APs and then authenticate and connect to the required AP. Therefore, you can do as follows to solve this problem: ● Check whether the channel supported by the STA is the same as that of the AP. If the AP uses a channel that is not supp orted by the STA, the STA fails to search for the AP. In this case, you can change the channel used by the AP. ● Check whether the STA uses the same authentication and encryption mode as the AP. If not, the STA fails to pass the authentication, which leads to connection failure.

Question	Solution
	● Check whether interference of same devices exists. To be specific, check whether wireless devices exist around. If yes, power off the devices and check whether the interference is reduced. Alternatively, you can mask the devices that gener ate interference or adjust their locations. ● Check whether interference of other devices exists. To be specific, check whether interference sources that greatly affect the working of the device, such as microwave oven or other high-power (2.4 GHz) devices, exist around. If yes, power off the devices and check whether the interference is reduced. ● Check whether incompatibility problems occur between the STA and AP. The STA may not comply with the 802.11 proto col specifications, which leads to the connection failure.
Why is the bandwidth not high after the connection of wireless network is established?	Usually, this problem is caused by environment interference, aging of the device, or reduced TX power. You can do as follows to solve this problem: ● Check the wireless channel. To be specific, choose another wireless channel to see whether the rate is greatly increased. ● Check wireless interference. To be specific, check whether wireless devices exist around. If yes, power off the devices and check whether the interference is reduced. Alternatively, you can mask the devices that generate interference or adjust their locations. ● Check signal strength. To be specific, check the signal stre ngth between the STA and AP. If the signal strength is low, the antenna may be loosened or the output power is reduced due to aging of the device. ● Check the NIC. If the the NIC power is low, you can test the bandwidth near the AP.

Question	Solution
Why does the connection between two devices fail to be established after the bridge is configured?	You can do as follows to solve this problem: ● Check whether **Working Mode** of the two devices is **Bridge**. ● Check whether the MAC address of the remote end is correct. ● Check whether **Country/Region** of the two devices is the same. ● Check whether Channel/Frequency of the two devices is the same. ● Check whether encryption method of the two devices is the same.
Why do the links in a wireless network be unstable (for example, increased delay or packet loss occurs) after the wireless network works normally for a period of time?	This problem may be caused by wireless interference around. Therefore, you can do as follows to solve this problem: ● Check whether all the cables such as network cables and antenna cables at the wireline end of the device are in good condition. ● Restart the device after power-off. ● Restore the default settings of the device and then re-config ure the parameters. ● Check whether the devices at the wireline and wireless ends are infected with virus.
In the case of two devices with bridge already configured, why does the Web page of the remote device fail to be opened if the local device is used to configure the remote device through a wireless link?	For device configuration at the wireless end, the Web server of the remote device responds slowly. You can solve this problem by waiting for about three minutes and then restarting the remote device. It is recommended that you implement device configuration at the wireline end.

B Technical Specifications

Physical specifications:

- Size: 180mm×180mm×49mm (L×W×H)
- Device weight: 300g (excluding the power adapter)

Electrical specifications:

- Power adapter: Input: 100-240VAC 50/60Hz; Output: 12VDC/1.2A
- POE power supply: 48VDC/500mA
- Max. power consumption: 5W

Environmental Requirements:

- Working temperature: -5℃ to 45℃
- Working humidity: 5% to 95%

IP degree

- IP degree: IP30

Certification passed

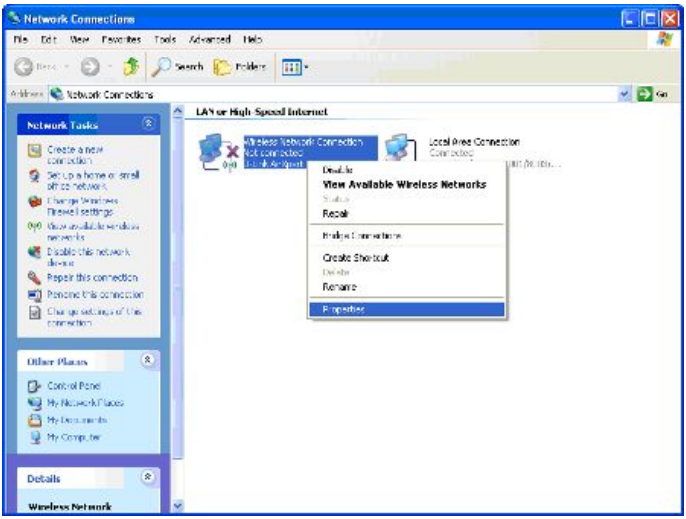
- CCCi, CE, Wi-Fi, radio transmission equipment model authorization

ZTE reserves the right of modifying the technical parameters of this manual without previous notice.

C Setting Computer Wireless Parameters

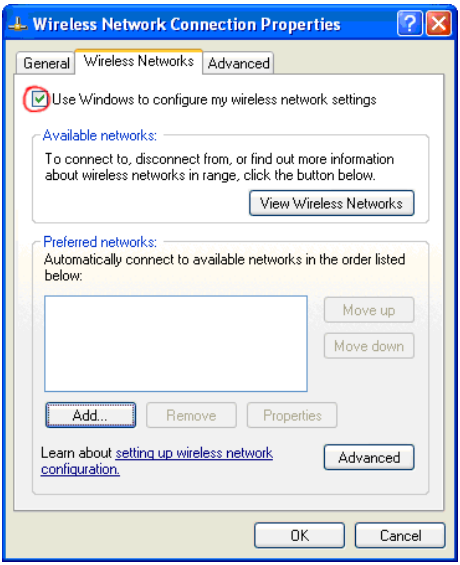
After a computer is equipped with a wireless NIC, it can access the WLAN (Wi-Fi) network. Before that, you need to set wireless parameters for the computer. The following considers an embedded wireless NIC of a laptop with Windows OS as an example.

1. On the Windows task bar, choose [**Start→Control Panel**].
2. Double-click the **Network Connections** icon. In the window that is displayed, right-click **Wireless Network Connection** and then choose **Properties**, as shown in the following figure.

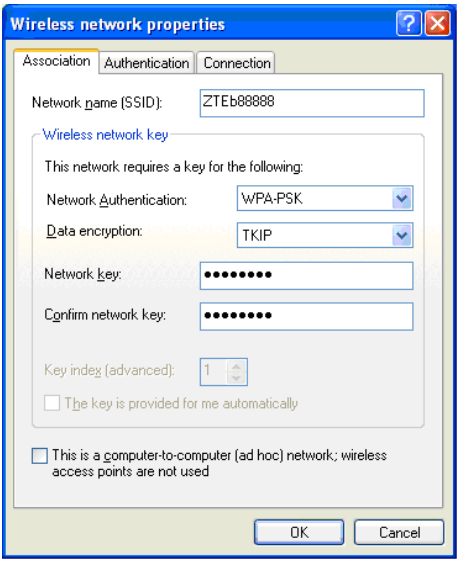


3. In the **Wireless Network Connection Properties** dialog box, click the **General** tab. Then, set the IP address of the wireless NIC and the address of the DNS server. Alternatively, you can obtain these addresses in DHCP mode.

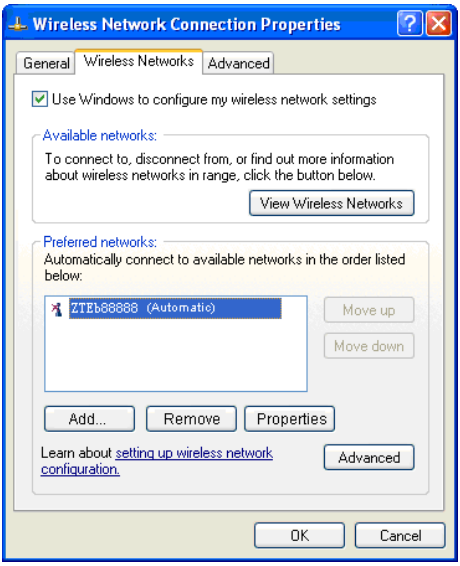
4. In the **Wireless Network Connection Properties** dialog box, click the **Wireless Networks** tab. Then, select the **Use Windows to configure my wireless network settings** check box and check whether the SSID of the required WLAN network exists in the **Preferred networks** area, as shown in the following figure.



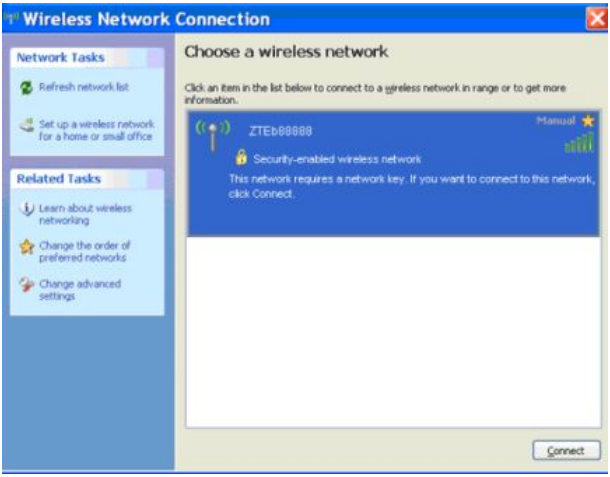
If not, click **Add** to add the SSID of the required WLAN network. Then, the **Association** tab is displayed, as shown in the following figure.



5. On the **Association** tab, set SSID in the **Network name** text box. Note that this SSID must be the same as that configured for the terminal and is case sensitive. Suppose that the terminal uses WPA-PSK encryption and the encryption key is 12345678. Then, set **Network Authentication** to **WPA-PSK** and **Data encryption** to **TKIP**. Meanwhile, clear the **The key is provided for me automatically** check box and enter `12345678` in the **Network key** text box. Note that this key must be the same as that configured for the terminal. Click **OK** to return to the dialog box, as shown in the following figure.

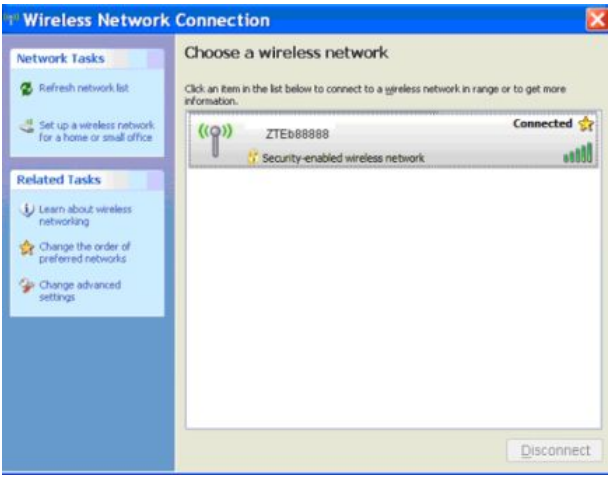


6. In the dialog box as shown in the above figure, click **View Wireless Networks** to display the wireless network list. Then, check whether the new wireless network is available. If not, click **Refresh network list** on the left. After selecting the required wireless network, click **Connect** at the lower part of the dialog box, as shown in the following figure.


Wireless Network Connection
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
ZTEb88888
Manual
Security-enabled wireless network
This network requires a network key. If you want to connect to this network, click Connect.
Connect

7. After re-entering the network key, click **Connect**.

8. After the wireless network is connected successfully, a window is displayed, as shown in the following figure.


Wireless Network Connection
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
ZTEb88888
Connected
Security-enabled wireless network
Disconnect